

CLAIMS

We claim:

1. A display pixel circuit comprising:
 - a data line loading circuit having a first capacitor;
 - a first reset circuit coupled with the data line loading circuit;
 - a diode coupled to the data line loading circuit;
 - a second capacitor associated with the diode; and
 - a second reset circuit coupled with the second capacitor,wherein the first reset circuit is configured to reset the first capacitor,
wherein the second reset circuit is configured to reset the second capacitor,
and wherein the diode is driven by a constant current after resetting the first capacitor and the second capacitor.
2. The display pixel circuit of claim 1, further comprising:
 - a plurality of transistors coupled to the diode;
 - and a third capacitor coupled to the diode.
3. The display pixel circuit of claim 2, wherein the third capacitor is a storage capacitor for receiving a current from the first capacitor.
4. The display pixel circuit of claim 1, wherein the diode comprises an organic light emitting diode.
5. The display pixel circuit of claim 1, wherein the first reset circuit comprises a first reset transistor connected to a signal line.

6. The display pixel circuit of claim 1, wherein the first reset circuit comprises a reset transistor connected to a signal line, the first reset transistor initializes a voltage of the first capacitor to a predetermined volt.

7. The display pixel circuit of claim 1, wherein the second reset circuit comprises a reset transistor connected to a scan line, the reset transistor initializes a voltage of the second capacitor to a predetermined volt.

8. A method of driving a display pixel circuit, comprising the steps of:
resetting a first capacitor of a data line loading circuit;
resetting a second capacitor associated with a diode; and
driving the diode with a constant current when the first capacitor and the second capacitor have been reset.

9. The method of claim 8, wherein the step of resetting the first capacitor comprises the steps of:

selecting a signal line;
activating a reset circuit; and
initializing a voltage of the first capacitor to a predetermined volt.

10. The method of claim 8, wherein the step of resetting the second capacitor comprises the steps of:

selecting a scan line;
activating a reset circuit; and
initializing a voltage of the second capacitor to a predetermined volt.

11. The method of claim 8, wherein the step of driving the diode comprises the steps of:

selecting a data line for data loading;

storing a first voltage in the first capacitor after resetting thereof;

activating a plurality of transistors;

storing a second voltage in a third capacitor;

deactivating the plurality of transistors; and

12. charging the second capacitor with the second voltage after resetting the second capacitor.